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**CENTRAL FAX CENTER****JUL 23 2007**

Applicants:	Denise J. Nelson et al.	Docket No.:	17,858.2
Serial No.:	10/750,505	T.C./A.U.:	3721
Confirmation No.:	1813	Examiner:	Sameh Tawfik
Filed:	December 31, 2003	Date:	July 23, 2007
For:	METHODS OF FOLDING DISPOSABLE ABSORBENT ARTICLES		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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I hereby certify that the attached correspondence comprising:

**Amended Appeal Brief (15 pages)**

16 total pages, including this page

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For: Methods Of Folding Disposable Absorbent Articles

**Amended Brief on Appeal to the Board of Patent Appeals and Interferences**

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 41.37 Appellants respectfully submit this Amended Brief in response to Examiner Tawfik's Notification of Non-Compliant Appeal Brief mailed on July 5, 2007, and in support of their Appeal of Examiner Tawfik's **Final Rejection** of claims 1-8, 10-19, 21, 22, 35-39, 41-46, and 48 which was mailed on March 15, 2007.

On April 3, 2007, Appellants, pursuant to 37 C.F.R. 41.31 mailed a timely Notice of Appeal. Examiner Tawfik mailed a Notification of Non-Compliant Appeal Brief on July 5, 2007. Thus, the time period for filing this Amended Brief ends on August 5, 2007.

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**Real Party in Interest**

The present Application has been assigned to Kimberly-Clark Worldwide, Inc.

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**Related Appeals and Interferences**

This is the second Appeal for the above-identified patent Application without a Board of Appeals decision. The previous Appeal brief was filed September 7, 2006, after which prosecution was reopened by way of the Office Action dated November 13, 2006. There are no other related appeals and/or interferences with regard to the present Application.

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**Status of Claims**

Claims 1-8, 10-19, 21, 22, 35-39, 41-46, and 48 remain in the application with claims 1-8, 10-19, 21, 22, 35-39, 41-46, and 48 being finally rejected. Claims 9, 20, 23-34, 40, and 47 have been cancelled.

Accordingly, claims 1-8, 10-19, 21, 22, 35-39, 41-46, and 48 are under appeal. A copy of the pending claims appears in the Claims Appendix of this Brief.

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**Status of Amendments**

No amendments were filed after the final Office Action mailed March 15, 2007

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**Summary of Claimed Subject Matter**

The following summary correlates claim elements to specific embodiments described in the application specification, but does not in any manner limit claim interpretation. Rather, the following summary is provided only to facilitate the Board's understanding of the subject matter of this appeal.

Independent claim 1 is directed to a method of folding a disposable absorbent article, as representatively illustrated, for example, in Figs. 7-17. The disposable absorbent article (30) has an initial upper surface (70), an initial lower surface (72), a longitudinal centerline (74), a transverse centerline (76), opposing first longitudinal side edges (46), and opposing first transverse end edges (48). Page 8, lines 1-5 and Figs. 3-6. The article (30) has an unfolded configuration. Page 16, lines 6-10. The method of folding includes forming one fold extending in a transverse direction by bringing a portion of the initial upper surface (70) into a facing relationship with another portion of the initial upper surface (70), the one fold being spaced between opposing first transverse end edges (48), the resulting partially-folded article having an intermediate first surface (80), an intermediate second surface (82) and opposing second transverse end edges (84), and thereafter forming a number, greater than one, of transversely extending folds in an accordion-like manner, the transversely extending accordion-like folds being spaced between opposing second transverse end edges (84) and thereby forming a folded article. Page 9, lines 1-31. The folded article has a folded configuration area and an unfolded configuration area and a ratio between the folded configuration area and the unfolded

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configuration area of no more than 0.14. Page 12, lines 15-22.

Independent claim 12 is directed to a method of folding a disposable absorbent article, as representatively illustrated, for example, in Figs. 7-17. The disposable absorbent article (30) has an initial upper surface (70), an initial lower surface (72), a longitudinal centerline (74), a transverse centerline (76), opposing first longitudinal side edges (46), opposing first transverse end edges (48), side margins (64), and opposing terminal side edges (60). The article (30) has an unfolded configuration. Page 16, lines 6-10. The method of folding includes forming at least one longitudinally extending fold in each side margin (64) by folding each first longitudinal side edge (46) inward toward the initial upper surface (70) and thus bringing at least a portion of the initial upper surface (70) into facing relationship with another portion of the initial upper surface (70), then forming one fold extending in a transverse direction by bringing a portion of the initial upper surface (70) into a facing relationship with another portion of the initial upper surface (70), the one fold being spaced between opposing first transverse end edges (48), the resulting partially-folded article having an intermediate first surface (80), an intermediate second surface (82), opposing second longitudinal side edges (47) and opposing second transverse end edges (84), and thereafter forming a number, greater than one, of transversely extending folds in an accordion-like manner, the transversely extending accordion-like folds being spaced between opposing second transverse end edges (84) and thereby forming a folded article. Page 10, lines 1-31. The folded article has a folded configuration area and an unfolded configuration area and a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14. Page 12, lines 15-22.

Independent claim 35 is directed to a method of folding a disposable absorbent article, as representatively illustrated, for example, in Figs. 7-17. The disposable absorbent article (30) has an initial upper surface (70), an initial lower surface (72), a longitudinal centerline (74), a transverse centerline (76), opposing first longitudinal side edges (46), and opposing first transverse end edges (48). Page 8, lines 1-5 and Figs. 3-6. The article (30) has an unfolded configuration. Page 16, lines 6-10. The method of folding includes forming a number, greater than two, of transversely extending folds in an accordion-like manner, the transversely extending folds being spaced between opposing first transverse end edges (48) and thereby forming a folded article. Page 9, lines 1-32. The folded article has a folded configuration area

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and an unfolded configuration area and a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14. Page 12, lines 15-22.

Independent claim 42 is directed to a method of folding a disposable absorbent article, as representatively illustrated, for example, in Figs. 7-17. The disposable absorbent article (30) has an initial upper surface (70), an initial lower surface (72), a longitudinal centerline (74), a transverse centerline (76), opposing first longitudinal side edges (46), opposing first transverse end edges (48), side margins (64), and opposing terminal side edges (60). The article (30) has an unfolded configuration. Page 16, lines 6-10. The method of folding includes forming at least one longitudinally extending fold in each side margin by folding each first longitudinal side edge (46) inward toward the initial upper surface (70) and thus bringing at least a portion of the initial upper surface (70) into facing relationship with another portion of the initial upper surface (70), then forming a number, greater than two, of transversely extending folds in an accordion-like manner, the transversely extending folds being spaced between opposing first transverse end edges (48) and thereby forming a folded article. Page 9, lines 1-32. The folded article has a folded configuration area and an unfolded configuration area and a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14. Page 12, lines 15-22.

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### **Grounds of Rejection to be Reviewed on Appeal**

#### **Ground 1**

Claims 1-8, 10-19, 21, 22, 35, 36, 42, and 43 stand rejected under 35 U.S.C. § 102(b) as being anticipated and thus unpatentable, over Japanese Patent Application JP 10-095,481 published on April 14, 1998 by Narawa et al. for applicant KAO Corporation (hereinafter "Kao")

#### **Ground 2**

Claims 37-39, 41, 44-46, and 48 stand rejected under 35 U.S.C. § 103(a) as being obvious and therefore unpatentable over Japanese Patent Application JP 10-095,481 published on April 14, 1998 by Narawa et al. for applicant KAO Corporation (hereinafter "Kao").

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**Argument****Ground 1 -- Rejection Of Claims 1-8, 10-19, 21, 22, 35, 36, 42 and 43**

Claims 1-8, 10-19, 21, 22, 35, 36, 42 and 43 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kao. Appellants respectfully submit that the Examiner's rejection is improper and should be reversed.

With respect to independent claims 1, 12, 35, and 42, there is no anticipation by Kao to achieve the claimed invention. Kao and the present application describe completely different ways of reducing different dimensions of an absorbent article. Kao describes compressing an absorbent article to remove the air therefrom and thereby decrease the thickness of the article. See translation, paragraphs 0010, 0015, and 0019. The article is then individually sealed in airtight packaging such that its compression is maintained. See translation, paragraph 0010. The ratios listed by Kao and referenced by the Examiner are a comparison of the thicknesses of an unpackaged, uncompressed article to a packaged, compressed article. See translation, paragraph 0019. Such an article might or might not be folded; the status of folding is irrelevant to the comparison as long as, presumably, the article has the same folds before and after compression. There is no evidence that the width and height dimensions of Kao's article change appreciably under Kao's compression. As a result, the ratio between the folded configuration area and the unfolded configuration area of Kao's article also does not change appreciably under Kao's compression.

On the contrary, the present invention claims a reduction in the overall footprint or area of an absorbent article by folding the absorbent article. The resulting folded article may very well have an increased thickness compared to an unfolded article, which is opposite the effect sought by Kao. For a proper 35 U.S.C. § 102 rejection, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Kao does not explicitly or impliedly teach a folded article having a folded configuration area and an unfolded configuration area wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14. There is nothing in Kao that teaches that any article folding beyond a typical, perfunctory fold is desirable or even possible.

The comparison of folded verses unfolded configuration areas in the present application is quite dissimilar from the comparison of compressed verses uncompressed thicknesses in

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Kao. There is no way to compare a thickness compression ratio to an area reduction ratio as these are separate and independent physical mechanisms.

Moreover, claims 2-8, 10, 11, 13-19, 21, 22, 36, and 43, which all eventually depend from these allowable independent claims, are also accordingly patentable over Kao. For at least the reasons set forth above, Appellants respectfully request that all the rejections under 35 U.S.C. § 102(b) be withdrawn.

**Ground 2 – Rejection Of Claims 37-39, 41, 44-46, and 48**

Claims 37-39, 41, 44-46, and 48 stand rejected under 35 U.S.C. § 103(a) as being obvious and therefore unpatentable over Kao. Appellants respectfully submit that the Examiner's rejection is improper and should be reversed. In particular, Kao fails to teach or suggest all of the claim limitations.

To establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143.

As described above with respect to independent claims 1, 12, 35, and 42, there is no anticipation by, nor motivation or suggestion in, Kao for one of skill in the art to modify the Kao disclosure to achieve the claimed invention. Kao and the present application describe completely different ways of reducing different dimensions of an absorbent article. As a result, Kao does not teach experimenting with reducing the area or footprint of an absorbent article, only compressing the article's thickness. For at least the same reasons discussed herein for the independent claims, dependent claims 37-39, 41, 44-46, and 48 cannot be rendered obvious by Kao. Thus, the rejection of dependent claims 37-39, 41, 44-46, and 48 is respectfully requested to be withdrawn.

For at least the reasons set forth above, Appellants respectfully request that all the rejections under 35 U.S.C. § 103 be withdrawn.

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**Conclusion**

For the reasons stated above it is Appellants' position that the Examiner's rejection of claims has been shown to be untenable and should be reversed by the Board.

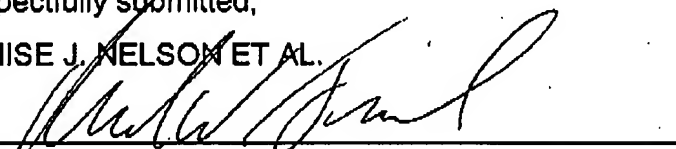
This is the second Appeal for the above-identified patent Application without a Board of Appeals decision. Therefore, the previously-paid fee for the Appeal dated September 7, 2006, is to be applied to the present Appeal, dated May 31, 2007. Any additional prosecutorial fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: (920) 721-8863.

Respectfully submitted,

DENISE J. NELSON ET AL.

By



Randall W. Fieldhack  
Registration No.: 43,611

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**Claims Appendix**

The claims on appeal are:

1. A method of folding a disposable absorbent article, the article having an initial upper surface, an initial lower surface, a longitudinal centerline, a transverse centerline, opposing first longitudinal side edges, opposing first transverse end edges and an unfolded configuration, the method of folding comprising: forming one fold extending in a transverse direction by bringing a portion of the initial upper surface into a facing relationship with another portion of the initial upper surface, the one fold being spaced between opposing first transverse end edges, the resulting partially-folded article having an intermediate first surface, an intermediate second surface and opposing second transverse end edges, and thereafter forming a number, greater than one, of transversely extending folds in an accordion-like manner, the transversely extending accordion-like folds being spaced between opposing second transverse end edges and thereby forming a folded article having a folded configuration area and an unfolded configuration area wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14.
2. The method described in claim 1, wherein the number of accordion-like transverse extending folds is an even number.
3. The method described in claim 2, wherein the number of accordion-like transverse extending folds is 2.
4. The method described in claim 2, wherein the one fold extending in a transverse direction is located substantially adjacent the transverse centerline.

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5. The method described in claim 4, wherein the accordion-like transversely extending folds are spaced substantially equally between opposing second transverse end edges.

6. The method described in claim 1, wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.08.

7. The method of claim 6, wherein the folded article is an infant diaper.

8. The method described in claim 1, wherein the accordion-like transversely extending folds are spaced substantially equally between opposing second transverse end edges.

10. The method of claim 1, wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no less than 0.04.

11. The method of claim 10, wherein the folded article is an infant diaper.

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12. A method of folding a disposable absorbent article, the article having an initial upper surface, an initial lower surface, a longitudinal centerline, a transverse centerline, opposing first longitudinal side edges, opposing first transverse end edges, side margins, opposing terminal side edges and an unfolded configuration, the method of folding comprising: forming at least one longitudinally extending fold in each side margin by folding each first longitudinal side edge inward toward the initial upper surface and thus bringing at least a portion of the initial upper surface into facing relationship with another portion of the initial upper surface, then forming one fold extending in a transverse direction by bringing a portion of the initial upper surface into a facing relationship with another portion of the initial upper surface, the one fold being spaced between opposing first transverse end edges, the resulting partially-folded article having an intermediate first surface, an intermediate second surface, opposing second longitudinal side edges and opposing second transverse end edges, and thereafter forming a number, greater than one, of transversely extending folds in an accordion-like manner, the transversely extending accordion-like folds being spaced between opposing second transverse end edges and thereby forming a folded article having a folded configuration area and an unfolded configuration area wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14.

13. The method described in claim 12, wherein the number of accordion-like transverse extending folds is an even number.

14. The method described in claim 13, wherein the number of accordion-like transverse extending folds is 2.

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15. The method described in claim 13, wherein the one fold extending in a transverse direction is located substantially adjacent the transverse centerline.

16. The method described in claim 15, wherein the accordion-like transversely extending folds are spaced substantially equally between opposing second transverse end edges.

17. The method described in claim 16, wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.08.

18. The method of claim 17, wherein the folded article is an infant diaper.

19. The method described in claim 12, wherein the accordion-like transversely extending folds are spaced substantially equally between opposing second transverse end edges.

21. The method of claim 12, wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no less than 0.04.

22. The method of claim 21, wherein the folded article is an infant diaper.

35. A method of folding a disposable absorbent article, the article having an initial upper surface, an initial lower surface, a longitudinal centerline, a transverse centerline, opposing first longitudinal side edges, opposing first transverse end edges and an unfolded configuration, the method of folding comprising: forming a number, greater than two, of transversely extending folds in an accordion-like manner, the transversely extending folds being spaced between opposing first transverse end edges and thereby forming a folded article having a folded configuration area and an unfolded configuration area wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14.

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36. The method described in claim 35, wherein the number of transversely extending accordion-like folds is an odd number.

37. The method described in claim 35, wherein the number of transversely extending accordion-like folds is an odd number greater than 4.

38. The method described in claim 37, wherein the number of transversely extending accordion-like folds is 5.

39. The method described in claim 38, wherein the transversely-extending accordion-like folds are spaced substantially equally between opposing first transverse end edges.

41. The method of claim 39, wherein the folded article is an infant diaper.

42. A method of folding a disposable absorbent article, the article having an initial upper surface, an initial lower surface, a longitudinal centerline, a transverse centerline, opposing first longitudinal side edges, opposing first transverse end edges, side margins, opposing terminal side edges and an unfolded configuration, the method of folding comprising: forming at least one longitudinally extending fold in each side margin by folding each first longitudinal side edge inward toward the initial upper surface and thus bringing at least a portion of the initial upper surface into facing relationship with another portion of the initial upper surface, then forming a number, greater than two, of transversely extending folds in an accordion-like manner, the transversely extending folds being spaced between opposing first transverse end edges and thereby forming a folded article having a folded configuration area and an unfolded configuration area wherein the folded article has a ratio between the folded configuration area and the unfolded configuration area of no more than 0.14.

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43. The method described in claim 42, wherein the number of transversely extending accordion-like folds is an odd number.

44. The method described in claim 42, wherein the number of transversely extending accordion-like folds is an odd number greater than 4.

45. The method described in claim 44, wherein the number of transversely extending accordion-like folds is 5.

46. The method described in claim 45, wherein the transversely-extending accordion-like folds are spaced substantially equally between opposing first transverse end edges.

48. The method of claim 46, wherein the folded article is an infant diaper.

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**Evidence Appendix**

None.

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**Related Proceedings Appendix**

None.